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Public Hearing held May 16, 2002

To: Mr. James Rogan, Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office

To the Attention of: Mr. Ronald P. Hack, Deputy Chief Information Officer

From: Randy Rabin, President
PatentArts, LLC

Subject: Request for Comments on the Proposed Plan for an Electronic Public Search Facility. Federal Register Notice Dated April 9, 2002

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Good Morning. My name is Randy Rabin. I am president of PatentArts, LLC, and have conducted patent research for companies and law firms for over 20 years. I am speaking today on my own behalf. During this time, I have performed several thousand patent searches in nearly every technology, with an emphasis on computer technology, including software, electronics and communications. From 1995 through 1997 I served on PTO public advisory committees regarding computer implementation, and most recently, at PTO's request, participated in sessions to explore how to improve patent search result quality.

I join my colleagues today in expressing as strongly as possible the necessity to retain the paper based collection of patents until the computer system (which we refer to as EAST) has proven itself as a dependable tool for accessing critical patent information. For simplicity, I will restrict my comments to the patent side, but most of my remarks are also appropriate for trademarks.

One might assume that those of us who support preservation of the paper collection are perhaps not ready to move into "the future." Quite the opposite is true. Many of us who are most vocal on this issue also happen to be among the most computer knowledgeable – not only are we skilled computer users, but much of our patent work involves inventions based on computer technology itself. Many of us have been accessing online databases since even before the first PC appeared. Part of my own history goes back to 1981, when after 4 years of searching patents strictly in paper form, I proposed to then Commissioner Mossinghof that we have terminals in the PSR that would enable us to access the databases of Dialog and other services. The power of the computer for quickly accessing data was obvious to anyone who sometimes spent many hours searching for a single

detail in hundreds of patents. But an expression was born in the 1980's: a computer search is a good aid, but not a replacement for, a paper search. I had hoped that by now, nearly 20 years later, a computer search would be good enough to replace a classified paper search.

As complex as the patent system is, it has a fundamental basis, and that is the act of comparing. This act of comparing can happen many times in the life of a patent: the inventor may use a collection of patents as a unique knowledge source in developing his invention, the patent attorney will use related patents to focus the claims of a patent application, and the examiner will conduct his own search and comparison in acting on an application. Later, the patent may be the subject of a validity or infringement search, with even deeper comparisons. Every aspect of a patent, from prosecution through litigation, is based on these comparisons with the written record. Obviously, whether the record exists in paper or electronic form, the written record must be accurate, complete and usable. Otherwise, every other aspect of the process is compromised. In the Federal Register notice announcing this hearing, the electronic database was described many times as "mature and reliable." Every day, every one of us who uses the electronic system is faced with its flaws in the form of missing or corrupt data. And faulty search results sometimes lead to the issuance of faulty patents, at great cost to the parties involved. [1]

FLAWS IN THE TEXT FILE

When conducting a search using EAST, the number of patents that can be searched using text input, whether it be a technical term, the name of an inventor or a company, or cited references, is limited to those patents having a text file. Of the 6.8 million issued patents, only 3.1 million, *less than half*, fall into that text searchable group, which spans the period 1971 to date. Of that latter group, however, more than 103,000 are missing text files and therefore are not retrievable using any terms other than patent number or classification.[2] Therefore, an examiner or searcher looking for patents using any words, for example "light amplification" or "halogenated biphenyls," would be limited to those patents issued in the 31 year period of 1971 to date, even though many patents for those technologies exist prior to 1971. More tragic though, is that during that period of 1971 to date, there is a 3% chance that the patent you need is missing a text file *and therefore will not be found.* In addition, if you tried to find all of the patents assigned to, for example, Merck Pharmaceuticals, or Dow Chemical, there is a significantly higher chance that patents will be missing due to the inclusion of chemical symbols in the text (note Exhibit **A**). PTO has been aware of this problem of missing data since at least 1992, but either through neglect or choice, has not posted a warning notice to users, nor have the missing files been restored in all that time. To the contrary, notices are routinely posted announcing that the date range of patents available for text searching is 1971 to date, giving the user a false sense of confidence that all data is present.

Another major problem is the complete inability to text search prior to 1971. Even small private companies have managed to OCR older patents back to at least the early 1900's. EAST still does not provide that ability. Since the appearance of an article in the New York Times, I have received a number of calls from across the country from people looking for patents to Thomas Edison, Nikola Tesla, Philo Farnsworth, and Chester Carlson. One sought wartime patents to his father. One sought patents to her uncle's company that operated during the 1950's. Not one of these could be found on the computer system due to its date range limitation (See Exhibit **B**).

FLAWS IN THE IMAGE FILE

A large number of patents have flaws within the image file, which of course contains text as well as drawings. In Exhibit **C** are several patents found in the past few days during the course of normal searching by one searcher. You will note drawings and text that are little more than black blobs. In the paper file, this of course does not occur, but sometimes a patent is missing. Since almost all patents are cross-referenced, the same patent can be located in another subclass.
In the computer database, however, a patent is recorded only once, without a "clean" copy to fall back on. Though a heroic effort is being made by one examiner on his own time to locate and replace defective Design Patent scans, too many exist in the Utility Patent database to correct in the near future. Despite the fact that examiners and searchers routinely encounter these flaws in the course of our regular work, there is no reporting system in place to allow this army of more than 3,500 to assist in the correction process.

A very significant problem in the study of patents, especially when many hundreds must be reviewed, is the poor image quality of text and drawings displayed on a monitor. In the PTO, 21" color CRTs are used to present black and white information. In Exhibit **D**, photographs were taken of a screen display of a patent, with a corresponding paper image of the patent taped to the screen for a side-by-side comparison. Reading a patent for content and meaning on a computer monitor is a very significant problem: many searches are aborted early due to visual fatigue, or patents are printed out in large numbers for later review.

THE PAPER PATENT COLLECTION

The classified patent collection has been demonized as wasteful of space, money and resources. We have already witnessed the merging of the two separate collections that nearly cuts the space requirement and other costs in half. The cost of maintaining one complete classified library has been conservatively estimated at between $5-7 million per year, including space and utilities, copies, and staff (compare this with the computer system, which has cost well over $1 billion so far, with annual expenditures exceeding $100 million, and $239 million in year 2001 alone).

The space requirements to house US and Foreign Patents, plus Literature, has been estimated at 74,000 square feet. For visualization purposes, this is equivalent to the floor space of an average K-Mart department store. Of course, a multi-story building of equivalent floor space is preferable, and would serve the needs of examiners and the public alike. In short, the classified paper system is the very cheapest, most dependable, user friendly, hacker-proof, already-existing backup system that could be devised or procured, for use by examiners and public alike. And it is already in service. But the paper collection is far more than a backup system: to experienced users, the paper collection has no equal as a research tool, allowing careful, in-depth study of a subject, and permitting the reader to far surpass the 1-2 hour limit of viewing a computer monitor. To be useful, the collection must be located in the immediate vicinity of the USPTO.

CLASSIFICATION

It is impossible to discuss any aspect of the search process without mentioning classification. If there is one very critical tool valued by examiner and searcher alike, it is the Classification System. It deserves its own patent, if not the Pulitzer. Without it, searching paper patents would be impossible. However, it is just as essential for conducting computer searches, especially in light of the failings of text searching. The classification system has been one of the dependable tools we have had as examiners and searchers. Yet, almost from the day the computer system was installed, classification has been slowly neglected until its reliability is in question. The importance of classification *must* be reevaluated and its decline turned around before it is too late. [3]

In summation, it is hard to believe, given the flaws pointed out in this and other hearings, that the computer system can be considered "robust and mature" as contended in the Federal Register notice. Such confidence is little more than wishful thinking. It is apparent that any decision affecting the fate of the paper libraries is being rushed by a plan to move into new buildings that are too small for either the paper collection or the examiner corps. [4]

I want to conclude by making some observations that will not be popular, but must be acknowledged. There are four primary groups affected by this pending decision to remove all paper records: 1)Attorneys and Agents; 2) Examiners; 3) Professional Searchers; and 4) Inventors and their Companies.

In my preparation for this hearing, I assumed that attorneys and agents would be eager to participate, seeking to guarantee that the system would be intact, and the tools would be in place to ensure the integrity of the patent system. Even the most adventurous attorneys I know balked at the idea of opposing PTO's actions, and being so identified. Two attorneys, one of them a former examiner, told me the following:

1) My clients want patents, not necessarily valid patents, and the more the better. If a searcher or examiner does a good job at finding prior art, my clients aren't happy, and neither am I.
2) Attorneys make money whether we represent the inventor or an infringer. The more inefficient the system is, the better it is for us.
3) If a patent application is rejected, or a patent is found invalid, the attorney is not considered liable, nor is the PTO, at any level.
4) Companies can afford lengthy litigation to prevail over smaller entities.

The second group, Examiners, unfortunately are forbidden by contract to speak on the subject, but privately have expressed strong opposition to the removal of their libraries, and the need to totally depend on EAST, despite having received a pay raise in exchange for their libraries. In official PTO surveys, examiners have often expressed the importance of a job well done in evaluating their own sense of job satisfaction, and the frustration they feel as their efforts are blocked or undermined by office policy.

The third group, professional searchers, has been the most vocal group on the issue we are discussing today because we are the closest to it. We feel an obligation to speak for those who cannot. The time we have spent on this issue, including preparation for this hearing, is considerable, and at our own expense. We are simply trying to do the best job for our clients that we can.

So that leaves the individual inventors, the corporate inventors and the companies who have often invested millions in their inventions and in their patents. I doubt more than a handful of those individuals know what is happening here today. These are the people who should be speaking today, the people who have invested their time and money in the creation of their inventions, who fund this system, and who rely on this system to work for them.

One final note - it was difficult to prepare for this hearing today, because of the widely held, and often experienced feeling that PTO management - to paraphrase Professor Higgins in "My Fair Lady" - will listen very nicely, and then do precisely what they were going to do anyway. But I hope it isn't true.

Thank you for the opportunity to speak.

Footnotes

1. See the Website: "bustpatents.com" for a list of patent lawsuits and their costs.
2. The following search statement is used: "text available".ti. AND @py>=1971.
3. The merits of the classification system were unanimously extolled in a USPTO public hearing in 1996.
4. Many of the points I have made today are further expanded in an article I wrote in the May, 2002 issue of Intellectual Property Today, pp.60-63, Exhibit **E**.